Obesity Years: Clinical Variation by Age Pre/Post Biliopancreatic Diversion/Duodenal Switch (BPD/DS)

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Disclosures

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Nothing To Disclose





Introduction

 Definition: Obesity Years-patients carrying obesity the longest accumulate more comorbidities and are less likely to resolve them.

Obes Surg. 2016 Feb;26(2):350-60. doi: 10.1007/s11695-015-1772-x.

Biliopancreatic Diversion with Duodenal Switch in the Elderly: Long-Term Results of a Matched-Control Study.

Michaud A^{1,2}, Marchand GB^{1,2}, Nadeau M¹, Lebel S³, Hould FS³, Marceau S³, Lescelleur O³, Biron S³, Tchernof A^{1,2}, Biertho L⁴.



Objective: To identify clinical variation by age, pre/post BPD/DS





Methods

- Retrospective Study
- 1673 patients from the Surgical Review Corporation BOLD database
- Grouped by age: <30, 30-40, 40-50, 50-60, 60-70, >70
- Examined pre-operative & follow up data at 2, 6, 12, 18 and 24 months
- Analyzed weight, BMI, and 30 weight-related medical comorbidities
- Statistics: ANOVA and General Linear Models including preand post-operative data modified for binomial distribution



Results: Pre-Op/12 months

Age	Weight (kg)	BMI (kg/m²)	Hernia (%)	Cholelithiasis (%)	Gerd (%)	SUI (%)	PCOS (%)
<30	156/92	55/32	3/20	14/35	49/29	19/20	14/1
30-40	154/90	53/31	6/11	19/40	47/25	31/17	4/3
40-50	151/91	52/32	11/22	24/46	52/37	37/20	2/2
50-60	142/88	50/32	17/27	25/45	54/38	39/24	1/1
60-70	134/86	48/31	17/45	27/64	53/55	52/38	0/0
>70	132/90	45/31	0/60	11/80	22/40	44/60	0/0
p (<)	0.05	0.05	0.0001	0.05	0.01	0.01	0.01





Results: %Pre-Op/%12 Months

Age	DM	Liver Disease	IFS	Lipid	HTN	РНТ	CHF	Angina	OSA
<30	18/12	3/4	3/0	27/18	39/22	9/10	1/2	3/0	41/24
30-40	32/5	5/3	2/1	28/6	50/23	11/7	2/1	2/0	56/27
40-50	42/8	7/11	6/2	47/14	63/26	13/9	2/3	3/1	65/38
50-60	57/11	8/13	13/8	61/26	80/39	13/7	8/4	6/3	68/38
60-70	59/27	4/9	15/13	65/23	82/52	20/19	12/17	7/9	64/52
>70	67/20	0/40	22/0	44/40	78/60	22/40	0/0	33/40	78/40
p (<)	0.01	0.01	0.01	0.01	0.0001	0.05	0.0001	0.0001	0.05





Conclusion

- In spite of lower pre-op BMI in the oldest groups, BPD/DS obesity co-morbidities varied directly by age.
- With clinically identical BMI across age groups at 12 months, resolution of 12 co-morbidities still was inversely proportional to age.
- Only diabetes resolved better among older patients.
- These findings suggest the concept of "obesity years" wherein patients with obesity the longest carry more co-morbidities and resolve them less after BPD/DS.
- These age variations should be considered in choosing BPD/DS patients and their management.



